

**RESPONSE**  
**U.S. Appln. No. 09/672,776**

states that as the surface area of the alumina becomes less than 30 m<sup>2</sup>/g, the number of scratches increases. However, the Examiner asserts that in Comparative Example 2 having a surface area of 27 m<sup>2</sup>/g, the corresponding number of scratches is 5, which is the same number of scratches as Comparative Example 1, which has a surface area of 50 m<sup>2</sup>/g.

When viewing the surface area and the  $\alpha$ -conversion ratio separately, that may be the case. However, the features of the present invention should be considered together.

In particular, the present invention requires that the alumina fine particles have an  $\alpha$ -conversion ratio of 65-90 % and a surface area of 30-80 m<sup>2</sup>/g. Accordingly, when the composition contains alumina fine particles having both features, the composition provides unexpectedly superior results compared to compositions with an  $\alpha$ -conversion ratio or surface area outside the claimed range. In addition, the effects of the present invention could not be expected from Kasai, which does not teach or suggest that the surface area of the particles has any effect on the composition.

In addition, Applicant respectfully submits that Applicant is not required to compare the claimed invention with subject matter that does not exist in the prior art, and that Applicant has shown that the present invention provides unexpectedly superior results over Kasai. In this regard, Applicant directs the Examiner's attention to *In re Chapman*, in which the Court held that requiring Applicants to compare the claimed invention with the polymer suggested by the combination of references relied upon in the rejection of the claimed invention under 35 U.S.C. § 103 "would be requiring comparison of the results of the invention with the results of the invention."

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*See also MPEP §716.02(e).*

Further, a person of ordinary skill in the art would not combine Kasai and Sakatani. Sakatani discloses that the surface area of the abrasive particle is preferably from about 40 m<sup>2</sup>/g to about 150 m<sup>2</sup>/g and that alumina is used as the abrasive. *See* col. 4, lines 20-23 and 33-34. However, Sakatani discloses that when  $\alpha$ -type alumina oxide is used, defects tend to occur on the polished surface. *See* col. 4, lines 36-37. In addition, Sakatani uses  $\alpha$ -alumina with a surface area of 25 m<sup>2</sup>/g in Comparative examples 2 and 10. Therefore, Sakatani does not disclose the use of  $\alpha$ -type alumina oxide in a composition for CMP (chemical mechanical polishing technique) having a surface area in the range of the present invention, contrary to the Examiner's position.

In contrast, Kasai discloses the use of  $\alpha$ -alumina fine particles. *See* col. 2, lines 15-18.

Therefore, one ordinarily skilled in the art would not be motivated to combine the cited references because Sakatani teaches against the use of  $\alpha$ -type alumina oxide in the composition, such that one would not have applied Sakatani's teachings to Kasai's  $\alpha$ -alumina.

Accordingly, the present invention is not obvious, especially in light of the importance of the  $\alpha$ -conversion ratio for achieving the desired effects of the composition. Therefore, Applicants respectfully submit that Kasai and Sakatani fail to teach the present invention, and respectfully request that the rejection be withdrawn.

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**II. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,



Keiko K. Takagi  
Registration No. 47,121

SUGHRUE MION, PLLC  
2100 Pennsylvania Avenue, N.W.  
Washington, D.C. 20037-3213  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

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